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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
RODRIGUEZ, RUTH C	

ART UNIT	PAPER NUMBER
3677	

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/688,031	CLARNER, MARK A.	
	Examiner	Art Unit	
	Ruth C. Rodriguez	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,8-16,21-27,30,31,35-38,40-42,46-50,52,56 and 57* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8-16,21-27,30,31,35-38,40-42,46-50,52,56 and 57* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Invention I in the reply filed on 20 October 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 58-61 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 20 October 2005.

Specification

3. The amendment filed 20 October 2005 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The Applicant alleges that obvious errors in the Specification at page 2, line 27; page 3, line 17; page 3, line 20; and at page 3, line 23 are being corrected since millimeters should be replaced with mils. The replacement of millimeters for mils is considered improper and deemed new matter since the originally filed disclosure does not provide support for

mils as a unit of dimensions and will not correlate to the dimensions shown in the tables between pages 10 and 11 of the specifications.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> **The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.**

5. Claims 35-38 and 40-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear whether the bulk aspect ratio being claimed by the Applicant must a have a value of more than 0.020 inches since the Applicant alleges that the dimensions included in the specifications are not correct and that the values should be in mils and not in millimeters (which correspond to the values in inches provided in the tables) as provided in the tables between the pages 10 and 11 that in deed correspond to the 0.020 inches. Therefore, it is unclear whether the ratio should have value of 0.020 inches or a different value.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-5, 8-16, 21-27, 30, 31, 34, 46-50, 52, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausen et al. (US 2004/0068848).

Ausen discloses a touch fastener component has a sheet-form base (11',11") and an array of fastener elements (14',14"). Each fastener element comprises a molded stem (15',15") and a head (17',17"). The stem extends outwardly from and integrally with the sheet-form base (Figs. 6a-7b). The head extends forward from a distal end of the stem to a tip (Figs. 6a-7b). The head has a lower surface forming a crook that retaining loops (Figs. 6a-7b). The head has an overall height, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the head, that is greater than 55 percent of an overall height of the fastener element, measured perpendicular to the sheet-form base (Figs. 6a-7b). Ausen fails to disclose that a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip, is greater than 0.6. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip, is greater than 0.6 since a change in the size of a prior art device is a design consideration

within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Doing so, is well known in the touch fastener art to provide the dimensions of the fasteners in accordance with the use and the required force. Changing the dimensions of the touch fasteners is well known in the art at the time of Applicant's invention and depends on the use of the touch fasteners. Providing a ratio greater than 0.6 is highly advantageous for those applications where heavy loads are held by the touch fastener and a stronger hold is required between the touch fasteners because the higher crook height will prevent accidental disengagement from the retaining loops.

Ausen also discloses that each fastener element has multiple heads extending in different directions and forming separate crooks (Figs. 6a-7b).

Each fastener element disclosed by Ausen has two heads (23) extending in essentially opposite directions (Figs. 6a-7b).

Ausen discloses a touch fastener having all the features disclosed above for the rejection of claim 3. Ausen fails to disclose that each fastener element defines an upper well between the two oppositely-directed heads, the well extending down to a height, measured perpendicularly from the base, of at least about 70 percent of the overall height of one of the two oppositely-directed heads. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have each fastener element defines an upper well between the two oppositely-directed heads, the well extending down to a height, measured perpendicularly from the base, of at least about 70 percent of the overall height of one of the two oppositely-directed

heads since the Examiner takes Official notice that having a fastener with two crook being provided with an upper well is well known in the touch fastener art.

Each fastener element has an overall length between opposite extents of the oppositely-directed heads, measured parallel to the base, of at least 1.8 times the overall height of the fastener element (Figs. 6a-7b).

The overall head height is less than 60 percent of the overall height of the fastener element (Figs. 6a-7b).

Ausen also discloses that:

- The tip extends toward the base (Figs. 6a-7b).
- The lower surface of the head is arched (Figs. 6a-7b).
- The head and stem form a unitary molded structure (Figs. 6a-7b).
- The head has a surface of resin cooled against a mold surface (Figs. 1 and 6a-7b
- The stem has opposing surfaces (Figs. 6a-7b).
- The stem and head have side surfaces lying in parallel planes (Figs. 6a-7b).
- The crook overhangs a surface of the stem (Figs. 6a-7b).
- The overhung stem surface extends at an inclination angle of between about 20 and 30 degrees with respect to a normal to the base (Figs. 6a-7b).

Ausen fails to disclose that the touch fastener component further comprises a backing material laminated to a side of the base opposite the fastener elements. However, it would have been obvious to one having ordinary skill in the art at the time

the invention was made to have the touch fastener component further comprises a backing material laminated to a side of the base opposite the fastener elements since the Examiner takes Official notice that having a fastener with two crook being provided with an upper well is well known in the touch fastener art.

Ausen fails to disclose that the fastener elements are arranged in a density of at least 350 fastener elements per square inch of the base. However, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to have the fastener elements are arranged in a density of at least 350 fastener elements per square inch of the base since the Examiner takes Official notice that having a fastener with two crook being provided with an upper well is well known in the touch fastener art.

Ausen fails to disclose that the fastener elements together cover at least 20 percent of an overall surface area of the base from which the fastener elements extend. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the fastener elements together cover at least 20 percent of an overall surface area of the base from which the fastener elements extend since the Examiner takes Official notice that having a fastener with two crook being provided with an upper well is well known in the touch fastener art.

Ausen discloses a touch fastener component has a sheet-form base (11',11") and an array of fastener elements (14',14"). Each fastener element comprises a molded stem (15',15") and two head (17',17"). The stem extends outwardly from and integrally with the sheet-form base (Figs. 6a-7b). The two heads extends in opposite directions from a distal end of the stem to corresponding tips (Figs. 6a-7b). The heads

have lower surfaces forming crooks for retaining loops (Figs. 6a-7b). At least one head has an overall height, measured perpendicular to the sheet-form base from a lowermost extent of the tip of the head to an uppermost extent of the head, that is greater than half of an overall height of the fastener element, measured perpendicular to the sheet-form base (Figs. 6a-7b). Ausen fails to disclose that a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip, is greater than 0.6. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip, is greater than 0.6 since a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Doing so, is well known in the touch fastener art to provide the dimensions of the fasteners in accordance with the use and the required force. Changing the dimensions of the touch fasteners is well known in the art at the time of Applicant's invention and depends on the use of the touch fasteners. Providing a ratio greater than 0.6 is highly advantageous for those applications where heavy loads are held by the touch fastener and a stronger hold is required between the touch fasteners because the higher crook height will prevent accidental disengagement from the retaining loops.

Ausen also discloses that both of the heads have overall heights that are greater than half of the overall height of the fastener element (Figs. 6a-7b).

A touch fastener component has a sheet-form base (11',11") and an array of fastener elements (14',14"). Each fastener element comprises a molded stem (15',15") and a head (17',17"). The stem extends outwardly from and integrally with the sheet-form base (Figs. 6a-7b). The head extends forward from a distal end of the stem to a tip (Figs. 6a-7b). The head has a lower surface forming a crook that retaining loops (Figs. 6a-7b). Ausen fails to disclose that a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip, is greater than 0.6. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a ratio of an overall height of the crook, measured perpendicular to the sheet-form base from a lowermost extent of the tip to an uppermost extent of the crook, to an entrance height measured perpendicular to the sheet-form base below a lowermost extent of the tip, is greater than 0.6 since a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). Doing so, is well known in the touch fastener art to provide the dimensions of the fasteners in accordance with the use and the required force. Changing the dimensions of the touch fasteners is well known in the art at the time of Applicant's invention and depends on the use of the touch fasteners. Providing a ratio greater than 0.6 is highly advantageous for those applications where heavy loads are

held by the touch fastener and a stronger hold is required between the touch fasteners because the higher crook height will prevent accidental disengagement from the retaining loops.

The crooks form an under crook angle of at least 180 degrees (Figs. 6a-7b). The head has an overall thickness, measured parallel to the base and perpendicular to a plane of the crook, that is greater than the entrance height of the crook (Figs. 6a-7b).

The head has an overall thickness measured parallel to the base and perpendicular to a plane of the crook that is greater than the entrance height of the crook (Figs. 6a-7b).

8. Claims 35-38 and 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ausen et al. in view of Martin et al. (US 2002/0116799 A1).

Ausen discloses a touch fastener component has a sheet-form base (11',11") and an array of fastener elements (14',14"). Each fastener element comprises a molded stem (15',15") and a head (17',17"). The stem extends outwardly from and integrally with the sheet-form base (Figs. 6a-7b). The head extends forward in an engagement direction from a distal end of the stem to a tip (Figs. 6a-7b). The head has a lower surface forming a crook for retaining loops (Figs. 6a-7b). Ausen fails to disclose that the fastener element has a bulk aspect ratio of more than 0.020 inch (0.51mm). However, Martin teaches a touch fastener comprising a sheet-form base (26) and an array of fastener elements (24). Each fastener element comprises a molded stem and a head (Figs. 1-10a). The stem extends outwardly from and integrally with the sheet-form base (Figs. 1-10a). The head extends forward in an engagement direction from a distal

end of the stem to a tip (Figs. 1-10a). The head has a lower surface forming a crook for retaining loops (Figs. 1-10a). The fastener element has a aspect ratio defined as the head area divided by the overall area of the touch fastener. This ratio is defined to determine how skin friendly is a touch fastener. A touch fastener is skin friendly when the head area is greater and this would result in a greater aspect ratio (Page 4, Paragraph 0081). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a fastener element with a bulk aspect, defined as a ratio of the product of an overall length of the fastener element, measured parallel to the sheet-form base in the engagement direction above an elevation of the tip, and fastener element thickness, measured parallel to the sheet-form base and the engagement direction at the elevation of the tip, to an overall height of the fastener element, measured perpendicular to the sheet-form base, of more than 0.020 inch (0.51 mm) since having a touch fastener with a greater head area results in a touch fastener that is skin friendly as taught by Martin. Additionally, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention have the necessary dimensions needed to obtain a bulk aspect ration of 0.020 inch for the fastener disclose by Ausen since a change in the size of a prior art device is a design consideration within the skill of the art. In re Rose, 220 F.2d 459, 105 USPQ 237 (CCPA 1955). It is well known in the touch fastener art to provide the dimensions of the fasteners in accordance with the use and the required force.

Response to Arguments

9. Applicant's arguments filed 20 October 2005 have been fully considered but they are not persuasive.

10. The Applicant argues that Ausen fails to disclose the necessary dimension needed to determine various ratios of touch fastener since Ausen fail to disclose any dimensions and that the drawings provided are not-to-scale. This argument fails to persuade because the Examiner has modified the rejection of the claims to indicate that the values obtained from the not-to-scale drawings are close to the required values and that a small change in size of the elements is only needed to obtained the required ratios especially since exact measurements of the dimensions are not required in the claims.

11. Regarding to claims 35-38 and 40-42, the argument presented by the Applicant is that the bulk aspect of 0.020 inches can not be obtained by using Martin as a secondary reference. The Examiner fails to be persuaded by this argument. The Examiner used the reference of Martin to establish that a change in the dimensions of a touch fastener is well known and that these dimensions can vary from the small values as those usually provided for these fasteners to higher values such as the one being provided by Martin. Therefore, one having ordinary skill in the art will acknowledge that is possible to obtain the claimed bulk aspect by simply changing the dimensions of the touch fastener and that these dimensions are commonly changed in accordance with the requirement of the application where the touch fastener is being used.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Billarant (US 3,417,440), Thomas (US 5,586,371), Miller et al. (US 6,054,091), Kennedy et al. (US 6,248,419 B1) and Chesley et al. (US 6,579,161) are cited to show state of the art with respect to touch fasteners having some of the features being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

rcr
January 9, 2006

ROBERT J. SANDY
PRIMARY EXAMINER